Vedval
Introduction to
Microphone
Working | Terms | Construction

What is a Microphone?

- It is a type of acoustic transducer or sensor.
- Amplitude of electrical signal are proportional to the sound waves.
- A microphone, popularly called a mic or mike, is a device – a transducer – that converts sound into an electrical signal.

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General terms used in Microphone

Amplifier: a device that tracks the amplitude of an incoming signal and proportionally increases the voltage, current or power of the signal by adding power from another source.

Capacitor microphone: an alternate, less-used term for condenser microphone.

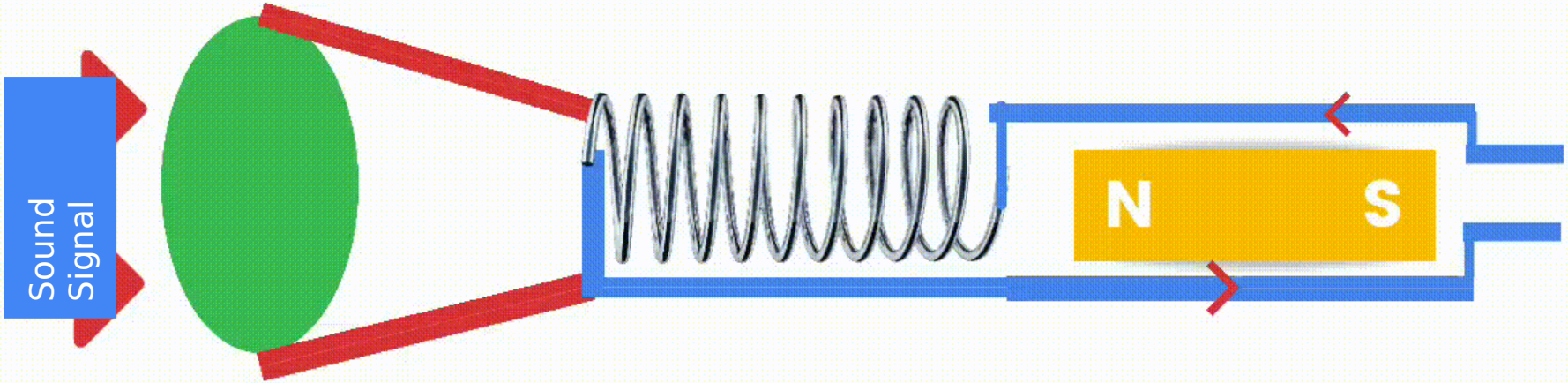
Dynamic range: a ratio (expressed in dBs) of the difference between the softest and the loudest sound that can be produced, reproduced or captured by a musical instrument or audio device.

General terms used in Microphone

Impedance: Measured in ohms, this is a way of expressing a circuit’s opposition (resistance and reactance) to a signal or current attempting to pass through. The practical difference between impedance and resistance is that impedance changes as a function of frequency.

Working of Microphone

- When you speak, **sound waves** created by your voice carry energy toward the microphone.
- Inside the microphone, the **diaphragm** (made of very thin plastic) moves back and forth when the sound waves hit it.
- The **coil**, attached to the diaphragm, moves back and forth as well.
- The **permanent magnet** produces a magnetic field that cuts through the coil. As the coil moves back and forth through the magnetic field, an electric current flows through it.
- The **electric current** flows out from the microphone to an amplifier or sound recording device.



Construction of Microphone

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The End